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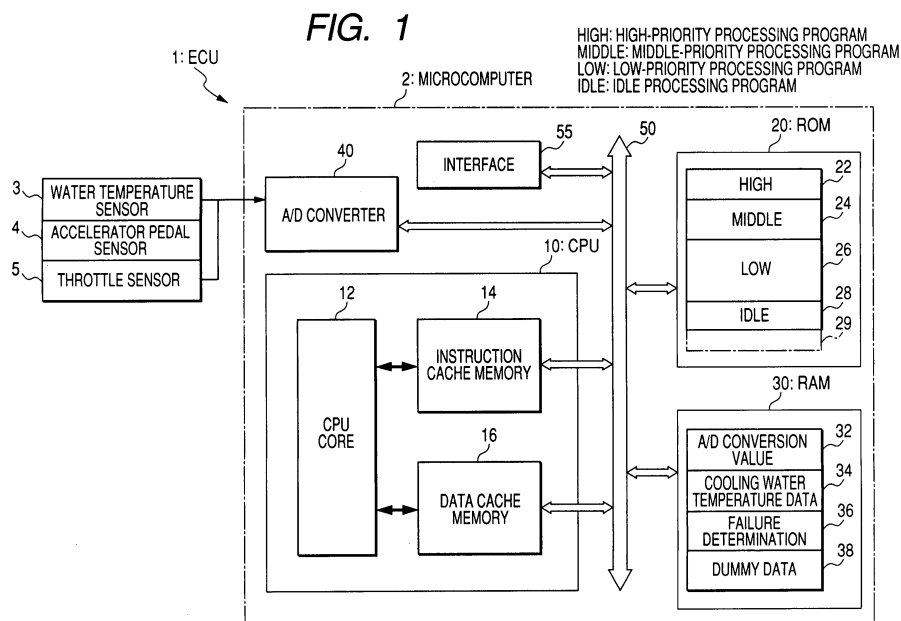
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(54) **Microcomputer provided with instruction cache memory**

(57) In a microcomputer provided with an instruction cache memory, in which a plurality of programs are executed, the execution time of each of the programs is ensured not be long. After dummy execution of high-priority processing in a time zone when a CPU of the microcomputer is in the process of executing idle process-

ing, a high-priority processing program is stored in the instruction cache memory. The time for executing the high-priority processing afterwards with normal timing can be reduced because the high-priority processing program has already been stored in the instruction cache memory, whereby the hit rate is increased.





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 06 02 6784

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	AAMODT T M ET AL: "Hardware Support for Prescient Instruction Prefetch" HIGH PERFORMANCE COMPUTER ARCHITECTURE, 2004. HPCA-10. PROCEEDINGS. 10TH INTERNATIONAL SYMPOSIUM ON MADRID, SPAIN 14-18 FEB. 2004, PISCATAWAY, NJ, USA, IEEE, 14 February 2004 (2004-02-14), pages 84-84, XP010778831 ISBN: 0-7695-2053-7 * page 2, left-hand column, line 11 - page 3, left-hand column, line 16 *	1-12	INV. G06F9/48 G06F9/38
A	EP 0 714 061 A (MOTOROLA INC [US]) 29 May 1996 (1996-05-29) * column 2, line 29 - line 35 *	1-12	
			TECHNICAL FIELDS SEARCHED (IPC)
			G06F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 22 February 2008	Examiner Brandt, Jan
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 06 02 6784

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0714061 A	29-05-1996	CN 1151047 A	04-06-1997
		JP 8221272 A	30-08-1996
		US 5642493 A	24-06-1997

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82